

5540

Service Manual

Mini Cassette

Mini Cassette Recorder

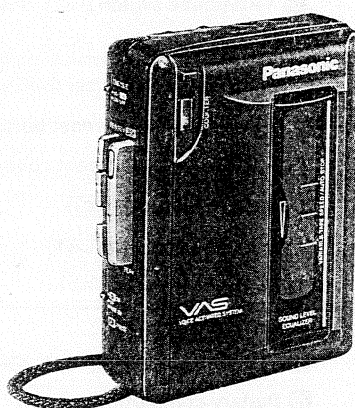
RQ-L340

Colour

(K)..... Black Type

Area

Suffix for Model No.	Areas.	Colour
[E]	Europe	(K)



■ SPECIFICATIONS

Power Requirement: Battery; 3V (two "AA" size, R6/LR6 batteries)

AC; with optional Panasonic AC adaptor RP-AC31

Motor: Electric governor motor

Power Output: 400mW (R.M.S. max)

Frequency Response: 180~6,000Hz (Normal)

Recording System: AC bias, Magnet erase

Tape Speed: 4.8cm/s

Monitor System: Variable

Program Time: 1 hour with C-60 cassette tape

Jack; Input: DC IN; 3V (\diamond -G- \diamond)

MIC; 0.25mV (150-600 Ω)

Output: MONITOR; 8 Ω , ϕ 3.5

Speaker: 4.5cm PM dynamic speaker (8 Ω)

Dimensions: 115.3(W) \times 88(H) \times 35(D)mm

Weight: 218g without batteries

Track System: 2-track monaural recording and playback

Notes:

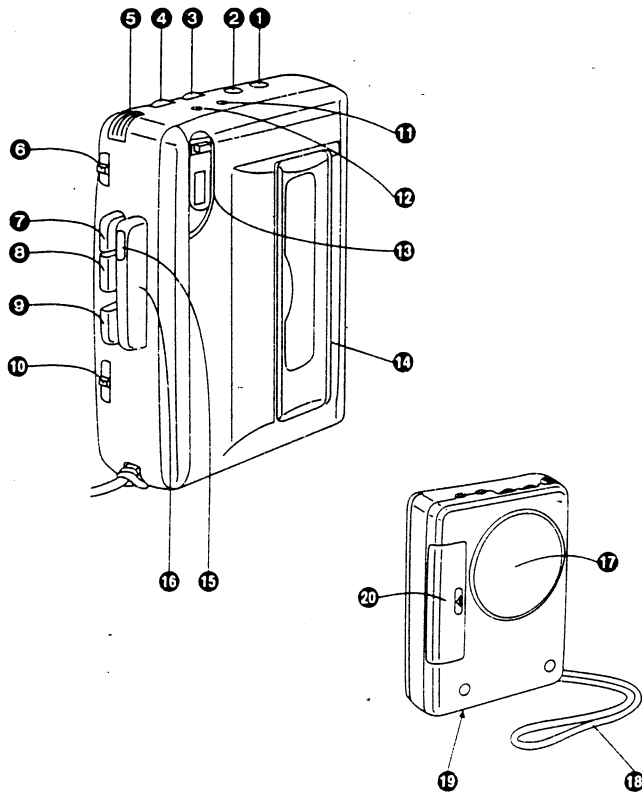
1. Weights and dimensions shown are approximate.

2. Design and specifications are subject to change without notice.

Panasonic

5540

LOCATION OF CONTROLS



- ① Monitor jack [MONITOR (8Ω)]
- ② Microphone jack (MIC) 0.25mV. 200~600Ω
- ③ Volume/VAS level control (VOLUME/VAS LEVEL)
- ④ Tape speed control (TAPE SPEED)
- ⑤ Built-in microphone (MIC)
- ⑥ Tone/sound level equalizer switch (TONE/SLE)
- ⑦ Rewind/review button (REW/REV)
- ⑧ Fast forward/cue button (FF/CUE)
- ⑨ Stop button (STOP)
- ⑩ VAS/pause switch (VAS/PAUSE)
- ⑪ Recording/battery check indicator (REC/BATT)
- ⑫ Sound level equalizer indicator (SLE)
- ⑬ Tape counter and reset button (COUNTER)
- ⑭ Cassette compartment cover
- ⑮ Record button (REC)
- ⑯ Playback button (PLAY)
- ⑰ Speaker (4.5 cm, 8Ω)
- ⑱ Hand strap
- ⑲ DC input jack (DC IN 3 V \diamond - \square - \diamond) [Bottom]
- ⑳ Battery compartment cover

DISASSEMBLY INSTRUCTIONS

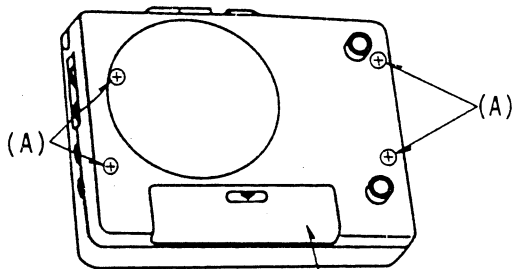


Fig. 1 (B)

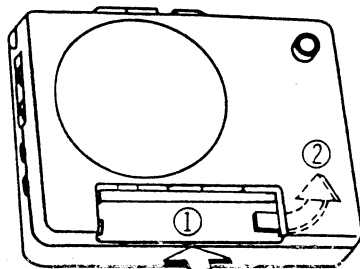


Fig. 2

●Removal of the Rear Cabinet

1. Remove the screws (A) (2×10)mm×4
2. Open the battery cover (B)×1
3. Remove the rear cabinet in the direction of arrow ① & ②.

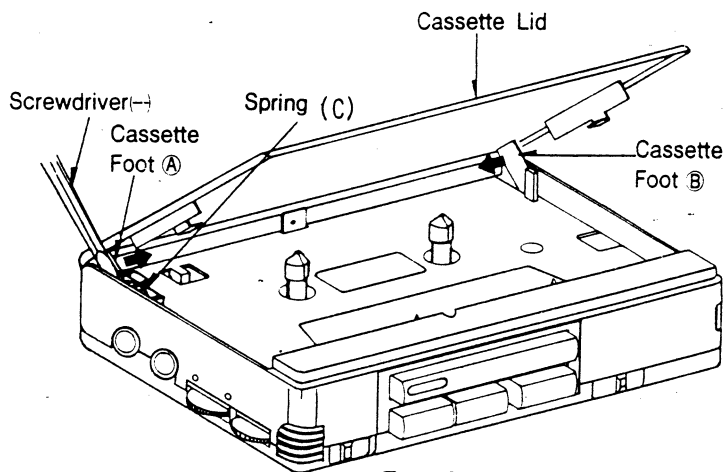


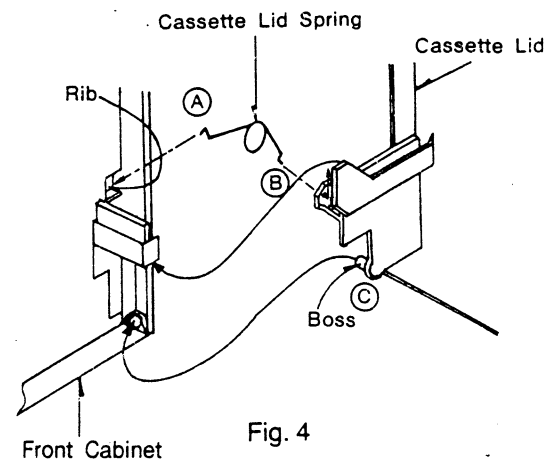
Fig. 3

●How to Removal of the Cassette Lid

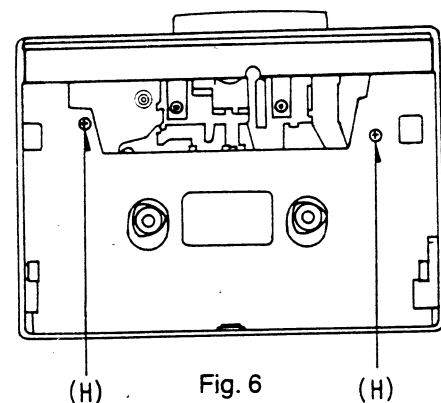
Note: Be careful not to break cassette foots ① and ② when removing the cassette lid.

1. Open the cassette lid.
2. With a screwdriver, push cassette foot ① to the right as shown in Fig. 3, and then pull out the right side of the cassette lid.
3. Push cassette foot ② to the left and then pull out the cassette lid.
4. Remove the spring. (C)×1.

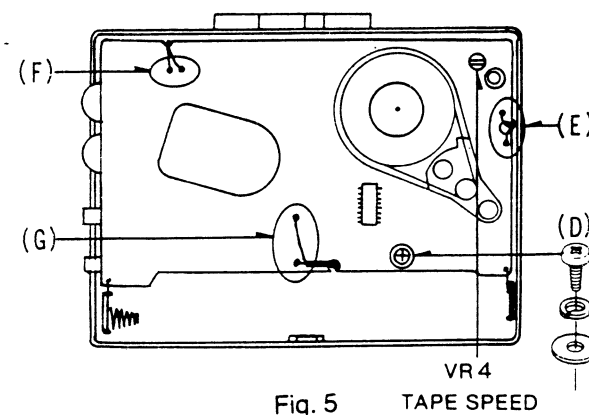
CABINET PARTS LOCATION



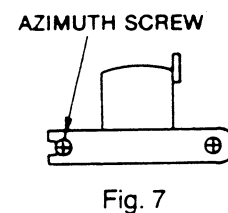
- How to Replace the Cassette Lid Spring**
1. Fit Part (A) on the rib of the front cabinet.
 2. Insert part (B) in the hole in the cassette lid.
 3. Fit the boss (C) in the front cabinet.



- Removal of the Front Cabinet and Mechanism (Fig. 6).**
1. Remove the deck screws (H) (2×6)mm×2.



- Removal of the Circuit Board (Fig. 5)**
1. Remove the chassis screw (D) (2×16)mm×1.
 2. Remove the solder (E), (F), (G) from flexible P.C.B.



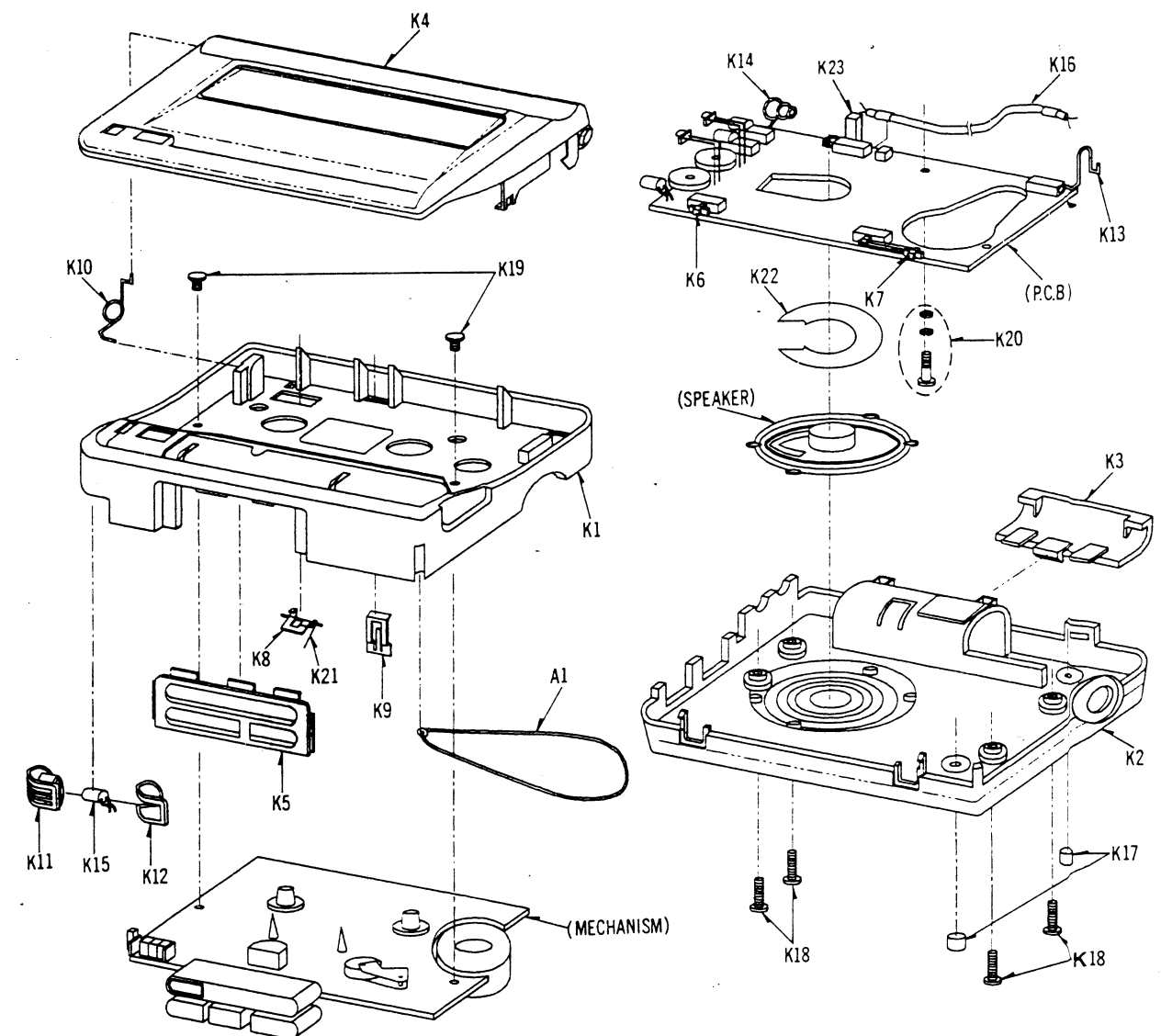
MEASUREMENT AND ADJUSTMENTS

ALIGNMENT INSTRUCTION

READ CAREFULLY BEFORE ATTEMPTING ALIGNMENT					
1. Set volume control to maximum.	4. Set tape speed VR center point.				
2. Set power source voltage to 3V DC.	5. Make sure head are clean.				
3. Set TONE/SLE switch to OFF.	6. Make sure capstan and pinch roller are clean.				

MEASUREMENT AND ADJUSTMENTS

ITEM	INPUT	MEASUREMENT POINT	SPECIFICATION	ADJUSTMENT POINT	REMARKS
Head azimuth	QZZCSX (6.3kHz, -10dB)	Monitor jack (8 Ω)	Maximum output	Head adjustment screw (See Fig. 7)	For tape playback
Tape speed	QZZCWAT (3kHz, -10dB)	Monitor jack (8 Ω)	3000 ± 50Hz	VR4 (Tape speed adjustment VR) (see Fig. 5)	For tape speed adjustment: (1) Play back test tape. (2) Adjust VR4 until a counter reading within the specified tolerances is obtained.



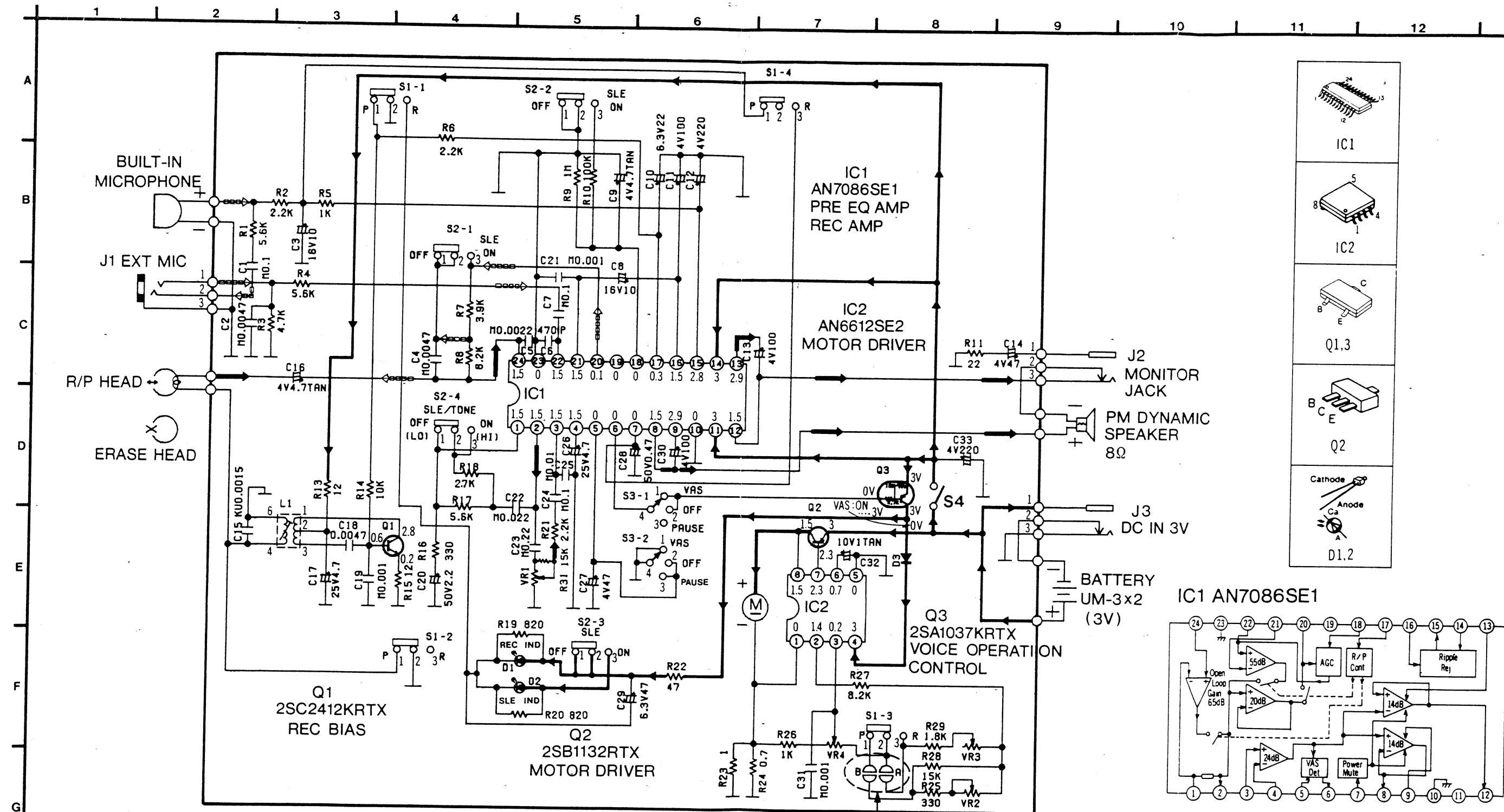
REPLACEMENT PARTS LIST

Indicates parts that are supplied by TAMACO.

Ref. No.	Parts No.	Parts Name & Description	Ref. No.	Parts No.	Parts Name & Description
CABINET PARTS					
K1	RFKKQL340PAK	Front Cabinet Ass'y	K17	RHG250TZA	Gum (LEG)
K2	RKF275TYA	Rear Cabinet	K18	XTNR2+10CFZ	Screw
K3	RKK236TZA	Battery Cover	K19	XTNR17+4.5FFK	Screw
K4	RFKLQL340EAK	Cassette Cover Ass'y	K20	XYC2+JF16FN	Screw (P.W.B. & Earth)
K5	RKE213TZA	Sky Cabinet	K21	RUS271TZA	Safety Lever Spring
K6	RBD267TZA	TON/SLE Knob	K22	RMX231TZA	PVC Sheet
K7	RBD268TZA	VAS/PAUSE Knob	K23	RHG245TZA	GUM
K8	RHE206TZA	Safety Lever (REC)	ACCESSORY		
K9	RUS270TZA	Tape Spring	A1	RKH91ZA0	Handle Strap
K10	RUS269TZA	Cassette Cover Spring	A2	RQTT0003-E	Instruction Manual
PACKING MATERIALS					
K11	RGX297TZA	MIC Ornament	P1	RPNT0003	Blister Front
K12	RHG249TZA	MIC Gum (BIG)	P2	RPNT0004	Blister Rear
K13	RJC305TZA	Battery Terminal (+)	P3	RPKT0003	Decoration Box
K14	RJC306TZA	Battery Terminal (-)	P4	RPFT0001	Polyethylene Cover
K15	ZP01L340P	MIC ASS'Y			
K16	ZD01L340P	Head Wire Ass'y			

SCHEMATIC DIAGRAM

RQ-L340 RQ-L340

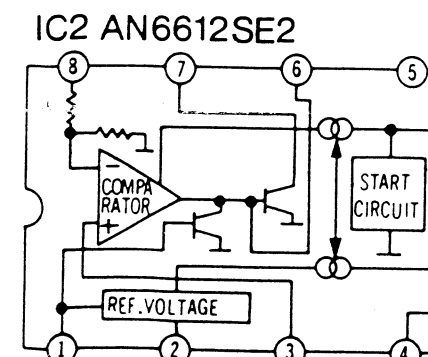
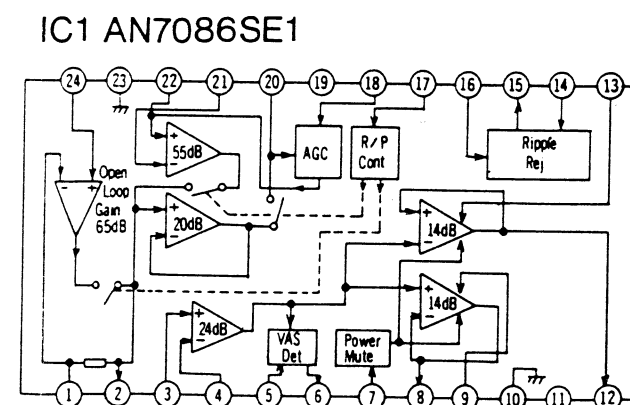
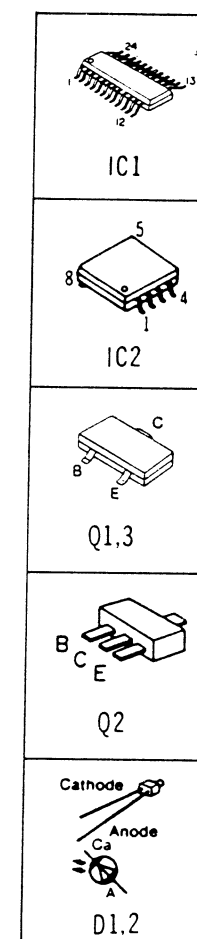


Notes:

- S1-1~S1-4: Record/Playback select switch in "PLAYBACK" position.
1 (1...PLAYBACK, 3...RECORD)
- S2-1~S2-3: SLE Switch in "OFF" position.
(1...OFF, 3...ON)
- S2-4: Tone Switch in "LOW" position.
(1...Low, 2...High)
- S3-1, S3-2: VAS/PAUSE Switch in VAS position.
(1...VAS, 2...PAUSE OFF, 3...PAUSE ON)
- S4: Motor Switch in "OFF" position.
- VR1: Volume Control VR.
- VR2: Play Tape Speed Control VR.

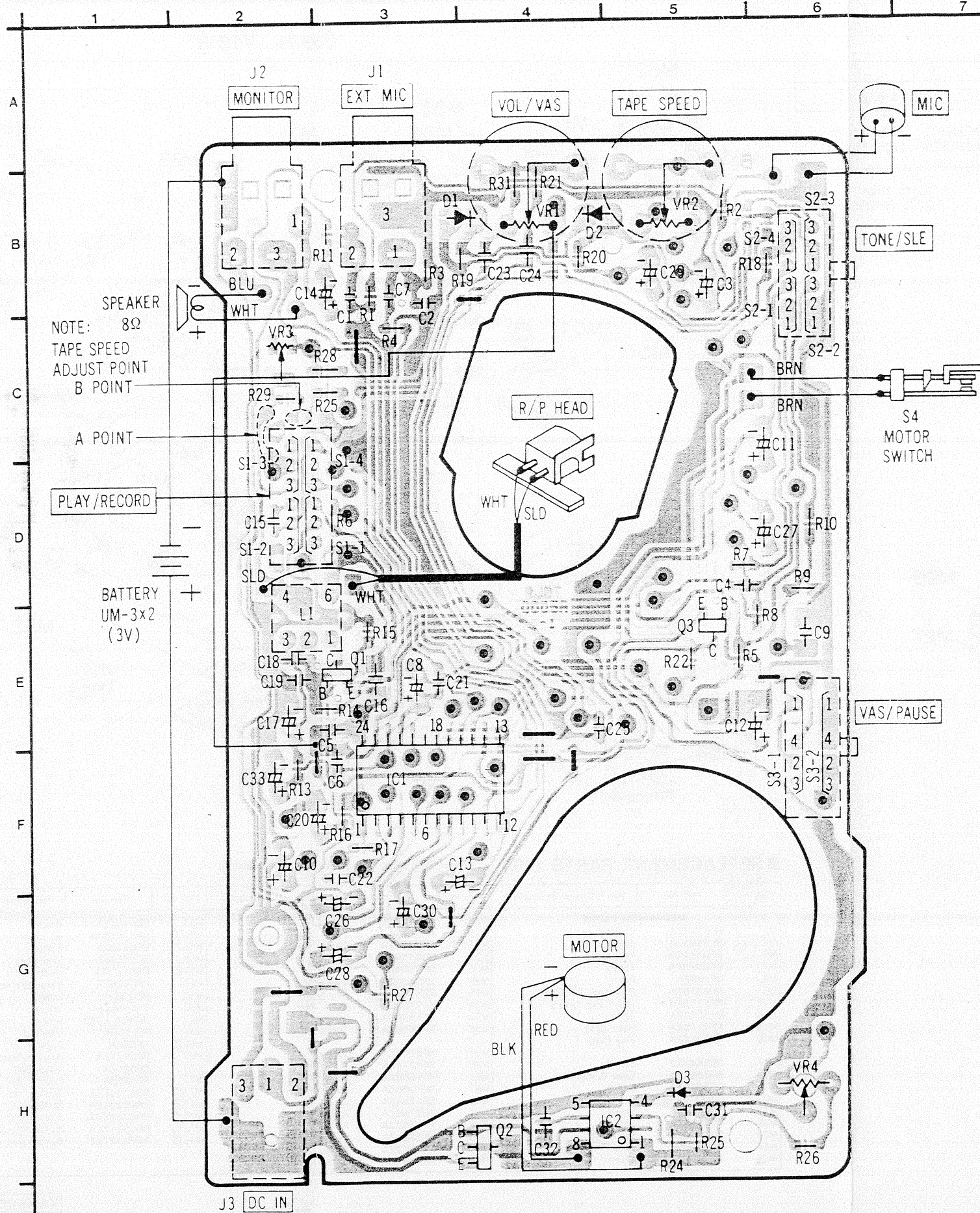
- VR3: Record 3kHz Speed Control VR.
- VR4: Play 3kHz Speed Control VR.
- All voltage values shown in circuitry are under no signal condition and playback mode with volume control at minimum position.
For measurement, use VTVM.
- Volume minimum output.....100mA
Volume maximum output.....300mA.
(315Hz 0dB tape playback, QZZCFM)
- ———— : Playback Signal Line.
- □□□□ : Record Signal Line.
- ———— : +B Line.

	REC	PLAY
A	CLOSE	OPEN
B	OPEN	CLOSE
IN PLAY STATE		



RQ-L340 RQ-L340

■ CIRCUIT BOARD AND WIRING CONNECTION DIAGRAM



■ REPLACEMENT PARTS LIST

Ⓣ Indicates parts that are supplied by TAMACO.

Ref. No.	Parts No.	Parts Name & Description	Ref. No.	Parts No.	Parts Name & Description
INTEGRATED CIRCUIT, TRANSISTORS AND DIODES			SPEAKER		
IC1 <input type="checkbox"/>	AN7086SE1	I.C. Power/ PRE EQ Amp	SP <input type="checkbox"/>	EAS45P301TA	Speaker
IC2	AN6612SE2	I.C. Power Amp	SWITCHES		
Q1	2SC412KRTX	Transistor	S1 <input type="checkbox"/>	RSH2D20YA-Q	Push Switch (R/P)
Q2	2SB1132RXTX	Transistor	S2 <input type="checkbox"/>	RSS2D011-K	Slide Switch
Q3 <input type="checkbox"/>	2SA1037KRXTX	Transistor	S3	ESD11H230	Slide Switch
D1 <input type="checkbox"/>	EL134HD	Diode (LED)	S4	RFA78ZA	Switch (Motor)
D2 <input type="checkbox"/>	EL134GD	Diode (LED)	JACKS		
D3	MA728TX	Diode	J1,2	RJJD3M6ZB-C	MIC/Monitor Jack
COIL			J3	RJJ4302-C	DC IN Jack
L1 <input type="checkbox"/>	RLO8A3-T	i.F. Transformer	VARIABLE RESISTORS		
VR1 <input type="checkbox"/>	EVLHFAA06A14	Volume Control V.R.	VR1 <input type="checkbox"/>	EVLHFAA06A14	Volume Control V.R.
VR2	EVLH01A19B53	Tape Speed Control V.R.	VR2 <input type="checkbox"/>	EVLH01A19B53	Tape Speed Control V.R.
VR3 <input type="checkbox"/>	RRN3A01B13WA	Semi V.R.	VR3 <input type="checkbox"/>	RRN3A01B13WA	Semi V.R.
VR4 <input type="checkbox"/>	EVNDXAA02B32	Semi V.R.	VR4 <input type="checkbox"/>	EVNDXAA02B32	Semi V.R.

Ref. No.	Parts No.	Ref. No.	Parts No.
RESISTORS		CAPACITORS	
R14.17	ERJ6GEYJ562V	C17	ECUV1C104MBN
R2.6	ERJ6GEYJ222V	C2	ECUV1H473MBN
R3	ERJ6GEYJ472V	C18	ECEATCKS100I
R5.26	ERJ6GEYJ102V	C4.13	ECUV1H472MBN
R7	ERJ6GEYJ392V	C5	ECUV1H222MBN
R8.27	ERJ6GEYJ822V	C6	ECUV1H471KBN
R9	ERJ6GEYJ105V	C9.16	RCS70GY475RE
R10	ERJ6GEYJ104V	C10	ECEA0JK220IV
R11	ERJ6GEYJ220V	C11.13.30	ECEA0GKS101I
R13.15	ERJ6GEYJ120V	C12.33	ECEA0GKS221I
R14	ERJ6GEYJ103V	C14	ECEA0GK470BI
R16.25	ERJ6GEYJ331V	C15	ECUV1H152KU
R18	ERJ6GEYJ272V	C17	ECEG1EKS47I
R19.20	ERJ6GEYJ821V	C19.21.31	ECUV1H102MBN
R21	ERJ6GEYJ222V	C20	ECEA1HKS2R2I
R22	ERJ6GEYJ470V	C22	ECUV1E223MBN
R23	ERJ6GEYJ1R0V	C23	ECUV1C2242FM
R24	ERSL43JR70U	C24	ECUV1C104MBM
R28.31	ERSL43JR153V	C25	ECUV1E103MBN
R29	ERJ6GEYJ182V	C26	ECEA1EK47B
		C27.29	ECEG0GKS470
		C32	RCS71AY105RE
CHIP JUMPERS			
RJ1.3	ERJ6GEY0R00V		
RJ4.8	ERJ6GEY0R00V		

Notes:

1. The circuit shown in () on the conductor indicates printed circuit on the back side of the printed circuit board.
2. The circuit shown in () on the conductor indicates printed circuit on the front side of the printed circuit board.
3. The symbols (●) shown in the circuit board indicate connection points between conductors on the front side and back side of the circuit board.

- This circuit board diagram may be modified at any time with the development of new technology.

Notes:

■ TAPE SPEED ADJUST METHOD

- (1). Adjust VR2 at center position. (which has defeat position)
- (2). Take B point short, A point open and push "PLAY" button.
Then Adjust VR4, you'll get 3kHz output signal. ($3\text{kHz} \pm 50\text{Hz}$)
- (3). Take B point open, A point short and push "PLAY" button.
Then Adjust VR3, you'll get 3kHz output signal. ($3\text{kHz} \pm 50\text{Hz}$)
- (4). If you Adjust VR4 again, please repeat (1). (2). (3). steps.
- (5). After (1). (2). (3). (4). steps, please B point short, A point open,
tape speed has adjusted completely.

NOTES:

BLK	Black
BLU	Blue
BRN	Brown
GRY	Gray
GRN	Green
L.BLU	Light Blue
ORG	Orange

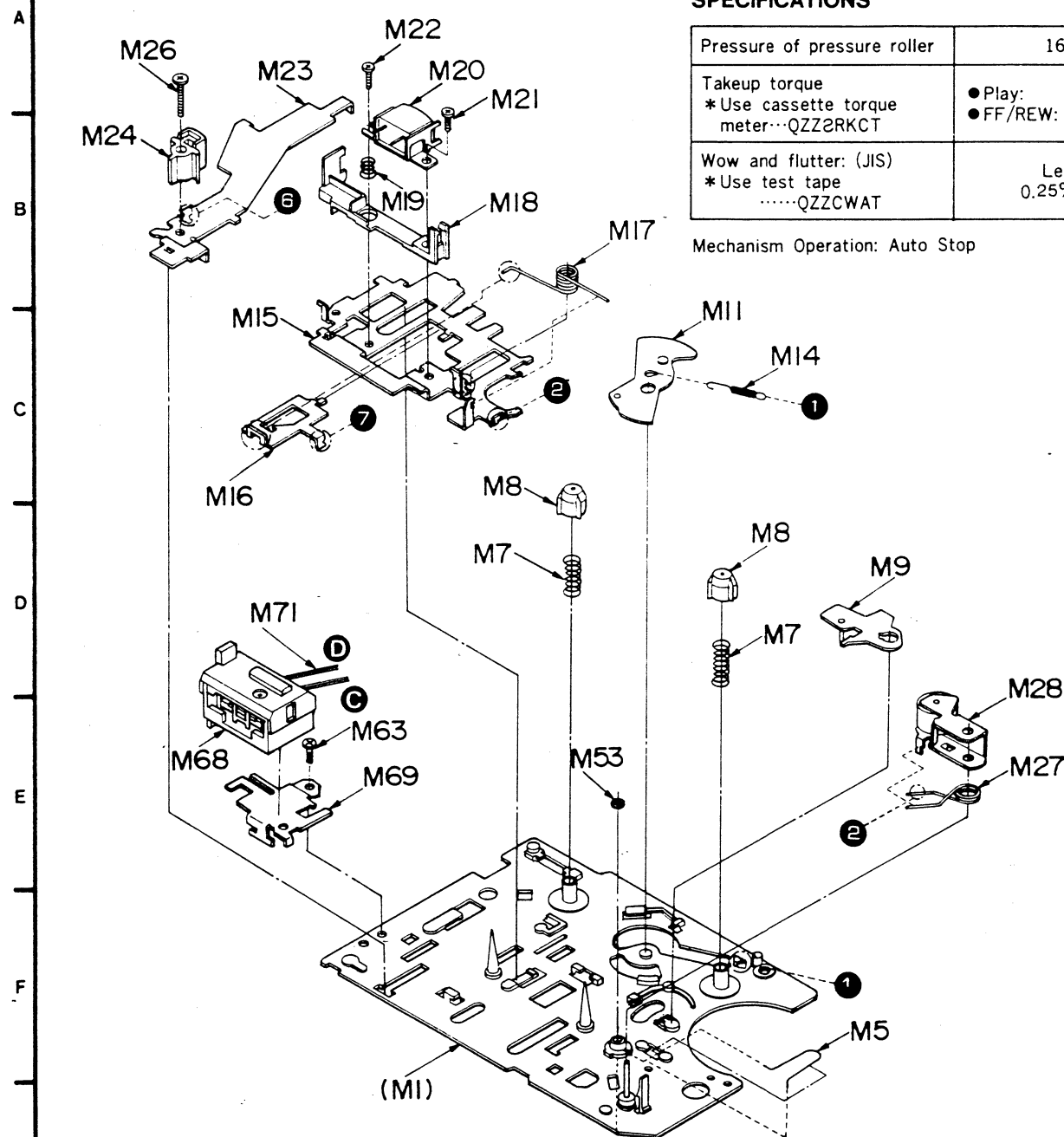
PNK Pink
RED Red
SLD Shield Wire
VLT Violet
WHT White
YEL Yellow

 : Chip resistor
 : Chip jumper (0Ω)

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MECHANISM PARTS LOCATION

Front View

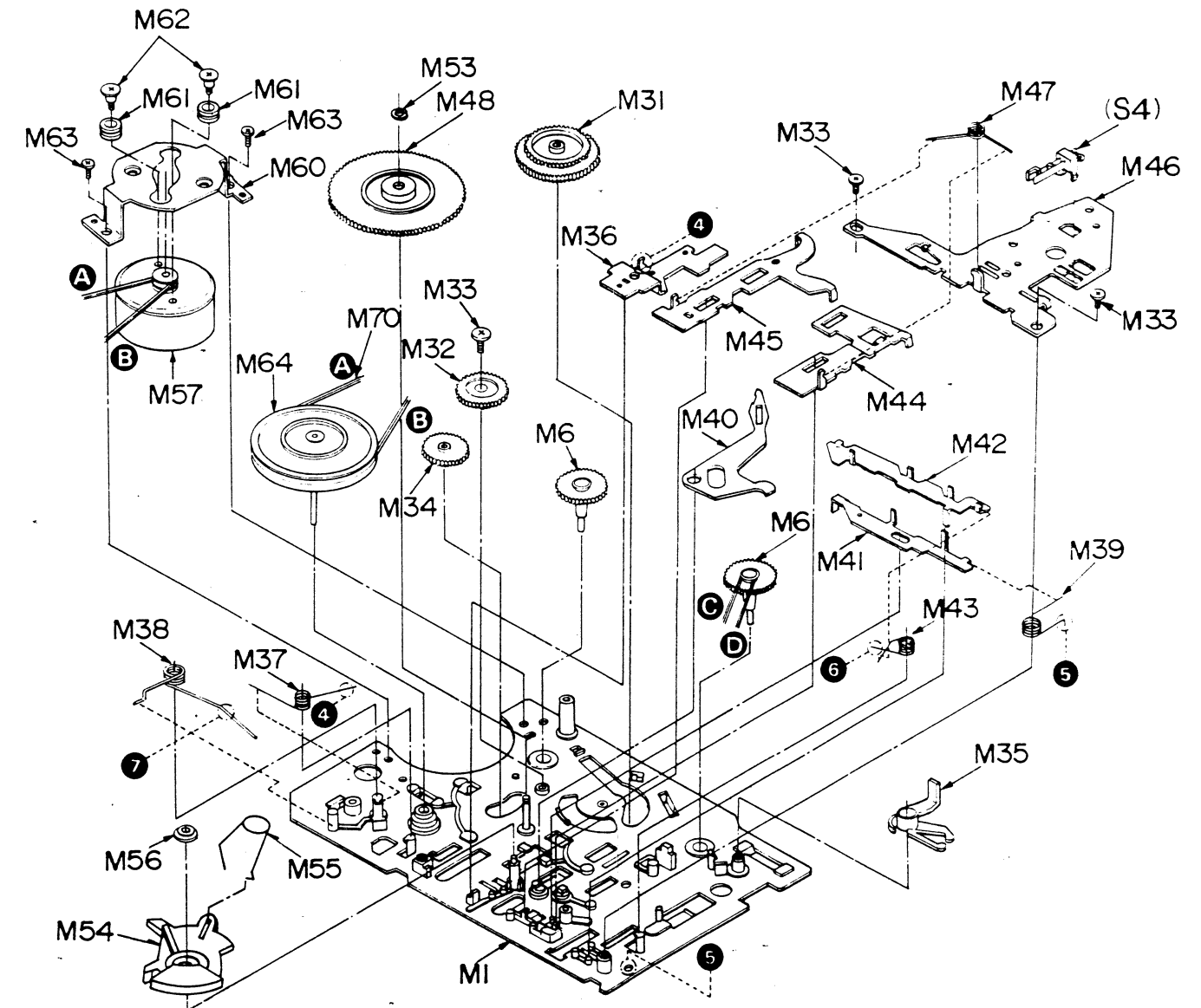


SPECIFICATIONS

Pressure of pressure roller	160±40g
Takeup torque * Use cassette torque meter...QZZ2RKCT	● Play: 36±14g·cm ● FF/REW: 110±50g·cm
Wow and flutter: (JIS) * Use test tapeQZZCWAT	Less than 0.25% (WRMS)

Mechanism Operation: Auto Stop

Rear View



REPLACEMENT PARTS LIST

□ Indicates parts that are supplied by TAMACO.

Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description	Ref. No.	Part No.	Part Name & Description
MECHANISM PARTS								
M1	RFU185ZA	Chassis Ass'y	M27	RFS697ZA	Spring	M53	RFN202ZA	Washer
M5	RFS692ZA	Spring	M28	RFR43ZA	Pinch Roller Ass'y	M54	RFY1038ZA	AS Lever
M6	RFG140ZA	Reel Gear	M31	RFG101ZA	Center Gear	M55	RFS948ZA	Spring
M7	RFS693ZA	Spring	M32	RFG102ZA	FF Gear	M56	RFY154ZA	Gear Bush
M8	RFJ88ZA	Reel	M33	RFE304Z	Screw	M57	RFM113ZA	Motor Ass'y
M9	RFD318ZA	Play Gear Plate Ass'y	M34	RFG103ZA	Play Gear	M60	RFD320ZA	Motor Bracket
M11	RFY775ZA	Gear Lever Ass'y	M35	RFY777ZA	Rec Arm	M61	RFI48ZA	Rubber
M14	RFS694ZA	Spring	M36	RFY959ZA	Stop Lever	M62	RFE366ZA	Screw
M15	RFU116ZA	Head Base	M37	RFS698ZA	Spring	M63	XQN16+CF3	Screw
M16	RFD319ZA	Play Plate	M38	RFS699ZA	Spring	M64	RFF50ZA	Flywheel
M17	RFS695ZA	Spring	M39	RFS700ZA	Spring	M68	RFC5ZA	Counter
M18	RFE362ZA	Head Guide	M40	RFY779ZA	F. R Lever	M69	RFD321ZA	Counter Bracket
M19	RFS696ZA	Spring	M41	RFY958ZA	Switch Lever	M70	RFB81ZA	Motor Belt
M20	RJHOC03MZAB	R/P Head	M42	RFY960ZA	Lock Lever	M71	RFB82ZA	Counter Belt
M21	RFE363ZA	Screw	M43	RFS784ZA	Spring	M72	RBC329TZA	Button, Play
M22	RFE364ZA	Screw	M44	RFY782ZA	REW Lever	M73	RBC333TZA	Button, REC
M23	RFY776ZA	Rec Lever	M45	RFY783ZA	FF Lever	M74	RBC330TZA	Button, REW
M24	RFH17ZA	Earse Head Ass'y	M46	RFE367ZA	Lever Guide	M75	RBC331TZA	Button, FF
M26	XQN2+10F	Screw	M47	RFS702ZA	Spring	M76	RBC332TZA	Button, Stop
			M48	RFG165ZA	Friction Gear Ass'y			

